

Remarks

In response to the Office action mailed July 11, 2005, reconsideration and allowance are respectfully requested.

Claims 1-4 are canceled and new claims 5-9 are added. No new matter is presented.

The present invention is characterized mainly by a current generation circuit, or bootstrap circuit, configured to heighten an input impedance of the output circuit. The term “bootstrap circuit” is introduced in order to make it easier to understand the differences between the present invention and the reference cited by the Examiner.

The bootstrap circuit recited in new claim 5 corresponds to current generation circuit 124 in a preferred embodiment described in the specification. In that embodiment, current generation circuit 124 has a function of heightening an input impedance of the output circuit 23 as a bootstrap circuit. Specifically, the current generation circuit 124 has a transistor Q2, which has the same electrical characteristic as a transistor Q1 of the output circuit 23, which is connected in series. Thus, a base current of the transistor Q2 is equal to a base current of the transistor Q1. The base current of the transistor Q2 becomes a collector current of a transistor Q3 by the action of a mirror circuit consisting of the transistor Q3 and a transistor Q4. Since the collector of the transistor Q3 is connected to the base of the transistor Q1, a current supplied to the base of the transistor Q1 of the output circuit 23 from a delay circuit is reduced, resulting in an effect of heightening the input impedance of the output circuit. This feature is clearly supported by the specification of the present invention.

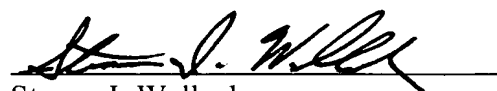
Shimozono (US 6,791,397), the reference cited by the Examiner, fails to disclose or suggest a “bootstrap circuit configured to heighten an input impedance of the output circuit” as recited in claim 5. The current generation circuit (6) in Shimozono does not have a circuit component that has the same electrical characteristic as the output circuit and is connected to

the output circuit in series, and thus does not supply a current having the same magnitude as a drive current for the circuit component to an input of the output circuit.

Therefore, according to the present invention, by the function of the bootstrap circuit, it becomes possible to eliminate the influence of attenuation caused by the delay current.

In view of the foregoing, this application is believed to be in condition for allowance, and a Notice to that effect is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steven I. Wallach", is written over a horizontal line.

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